Why an Herb's Structure is Important

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Plants that provide us with herbs and spices can be grown very easily in many places in the garden. They do need some special attention, however, based on root needs and upper plant growing conditions. Giving them that loving care up front in your planting plan will help them produce that much more for you to enjoy.

Root Structure

Perennials and annuals grow differently, and it's not just how long the plant lasts that varies. It's not unusual for perennials to grow deeper and more abundant roots. It makes sense, as the plants need those more substantial systems to hold themselves upright and survive harsh winter conditions. Over time, the roots continue to spread just as the portion of the plant above ground gets larger and larger.

Annuals, on the other hand, might have very fine roots, since they aren't spending their time preparing for winter dormancy or big growth. They just want to put out all the greenery they can and flower to continue their legacy when appropriate! Their roots may not spread as widely. But in some cases, such as putting an annual in a pot, the size of the pot itself can limit the overall upper growth of the plant too.

Let's compare two herbs, rosemary and basil. Perennial rosemary will develop substantial root systems over time. In fact, it's not unusual for the roots to be sent very deep in search of water by this drought-tolerant plant. Pulling up a rosemary plant that's been in the ground for a few years can produce a huge hole where the root ball once was, and that's if you can get all of it out – a big if!

Basil, on the other hand, will grow quite happily in a container. The overall size of the upper part of the plant is decided by the variety of basil, but ultimately it will depend on the size of the pot, too. Big framed Sweet Italian basil in a small pot will stay stunted because the roots have nowhere else to spread. It's not unusual to pull out an old basil plant and find that the whole contents of the pot comes with the plant. The roots are so dense that the soil appears to be gone.

The moral to this story? Consider how much root space the herb plant will need over time when you are selecting and preparing the planting area. You don't want the taproot of a particularly large perennial to grow down through the only hole in the bottom of your pot, effectively anchoring it to the earth and plugging your drainage. And you don't want something like mint spreading into flowerbeds or walkways just because it isn't contained.

Leafy Structure

Where and how you plant an herb also should depend on the upper structure of the plant, the leaves and stems above the ground. Returning to our old friend basil, think about how large the top of this plant can grow. You could have a basil bush in no time with some varieties. There are three considerations based on the leafy structure of an herb – stability, watering and nutrition. The first issue is how stable the base will be to hold up the rest of the plant. Did you ever have a plastic pot full of basil blow over in a good wind? (I have!)

Think too about watering needs. A pot will need frequent watering – daily or twice a day – during the heat of summer, and even in-ground conditions will need refreshing at least every other day. This vital watering also leeches out the nutrients in the soil. Herbs take up a lot of nutrients so that they can invest that energy in leafy structure growth. Even in the ground, regular fertilizer is required to have a vibrant herb you'll be happy to use in your cooking.

Fooling It!

Finally, consider faking some conditions. Yes, that's right – don't you want to extend your growing season? The leafy structures are the first to be affected by colder temperatures, and root growth in a pot is similarly slowed by cooler conditions.

In the ground, place an herb against a warm wall with a southern exposure to extend the season at either end. This may mean protecting the upper portion at the beginning and end of the season too, since frostbite will be a concern.

Consider planting some annuals later than usual in a pot to have them in prime condition under protection at the end of the season, adding a few weeks to your enjoyment. And with perennials, consider having both in-ground and container plantings for the same reason. Yes, you can fool Mother Nature!

Next month, we'll talk about some old favorites and new additions to the herbs and spices in your garden, and why it's good to branch out and use them.

Saturday, April 21st, Master Gardeners present a free class on "Tress and Shrubs." This presentation focuses on plants well-adapted to El Dorado County's climate and how to integrate them into a pleasing and balanced landscape design. The class is from 9 a.m. to 12 noon and is held in the Veterans Memorial Building, 130 Placerville Drive in Placerville.

On Saturday, April 28th, Master Gardeners will host their 3rd Annual Spring Plant Sale. There will be a great selection of annuals, perennials and vegetables for sale. Stay for the gardening presentations on growing tomatoes and giant pumpkins and composting. Hand tool sharpening will be available for a small fee. The sale is from 8 a.m. to 3 p.m. and will be held in the Veterans Memorial Building parking lot.

Master Gardeners are available to answer home gardening questions Tuesday through Friday, 9 a.m. to noon, by calling (530) 621-5512. Walk-ins are welcome. The office is located at 311 Fair Lane in Placerville. For more information about our public education classes and activities, go to our Master Gardener website at http://ucanr.org/sites/EDC_Master_Gardeners/. Sign up to

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